

7th.—S. S. "City of Chester," in N. 42° 53', W. 51° 30', passed an iceberg four hundred feet high and six hundred feet long; temperature of air, 54°; water, 53°; bark "Iodine," in 51° 50', W. 48° 0', to N. 49° 25', W. 47° 0', on the 8th, passed several small icebergs.

8th.—S. S. "Celtic," in N. 44° 15', W. 49° 12', at 2.30 p. m., passed three small icebergs.

9th.—S. S. "Ethiopia," in N. 48° 14', W. 48° 55', at 3.15 p. m., passed an iceberg; s. s. "Ontario" passed several large icebergs in Belle Isle Strait; also, three small icebergs about one hundred and eighty-six miles east of Belle Isle.

10th.—S. S. "Siberian," when in the Strait of Belle Isle, passed several icebergs between Point Amour and Cape Norman; from Cape Norman to Belle Isle she passed twenty-seven bergs, some of which were very large.

11th.—S. S. "Hibernian," in N. 43° 30', W. 49° 40', passed a moderate-sized iceberg; s. s. "Bothnia," in N. 43° 18', W. 49° 36', passed a large iceberg; also another about seven miles west of the first; in N. 43° 18', W. 51° 12', passed another; bark "J. P. A.," in N. 42° 26', W. 50° 40', passed an iceberg about two hundred and fifty feet high and ten miles long; s. s. "Siberian," between Belle Isle and N. 53° 20', W. 48° 50', passed numerous icebergs; s. s. "Circassian" passed numerous icebergs from Belle Isle to about one hundred and eighty miles east of that island.

12th.—S. S. "Fulda," in N. 42° 29', W. 50° 8', passed a small iceberg; s. s. "Main," in N. 48° 1', W. 44° 23', passed a small iceberg.

15th.—S. S. "Assyrian Monarch," passed a small iceberg twenty miles southwest of Cape Race; s. s. "Adriatic," in N. 44° 55', W. 48° 56', passed a large iceberg; also passed another, with several small pieces, in N. 44° 53', W. 49° 5'; s. s. "Furnessia," in N. 47° 50', W. 45° 30', at 3.15 p. m., passed an iceberg; at 7.15 p. m., in N. 47° 40', W. 46° 0', passed another.

16th.—S. S. "Samaria," in N. 43° 3', W. 49° 37', passed a large iceberg; s. s. "Venetian," in N. 43° 8', W. 51° 25', passed a large iceberg—a solid mass about two hundred feet high, five hundred feet long, and four hundred feet wide; also saw a small berg about three miles north.

17th.—S. S. "State of Pennsylvania," in N. 48° 16', W. 44° 17', passed a large iceberg about ten miles south of ship.

18th.—S. S. "Nevada," in N. 43° 52', W. 51° 56', passed a large iceberg apparently aground; s. s. "Roman," in N. 42° 41', W. 50° 10', at 9.30 p. m., passed two large icebergs.

19th.—S. S. "Elysia," in N. 43° 2', W. 49° 30', at 2.30 p. m., passed a large iceberg; at 4.45 p. m., in N. 43° 0', W. 50° 0', passed another with several small bergs near it.

21st.—S. S. "Indipendente," in N. 42° 50', W. 50° 22', passed five large icebergs.

22d.—S. S. "Britannic," in N. 42° 50', W. 49° 56', at 3.45 p. m., passed a small iceberg; at 4.45 p. m., in N. 42° 45', W. 50° 16', passed one large berg and several pieces; s. s. "Scythia," in N. 43° 03', W. 50° 39', at 4.50 a. m., passed a large iceberg; at 6 a. m., passed a medium-sized berg in N. 43° 02', W. 51° 05'.

23d.—S. S. "Etruria," in N. 42° 21', W. 48° 48', at 12 m., passed a medium-sized iceberg; at 1.45 p. m., passed another in N. 42° 17', W. 49° 09'; s. s. "Nessmore," in N. 42° 14', W. 49° 30', passed an iceberg, air, 50°, water, 44°; in N. 42° 18', W. 49° 00', passed another, with small pieces near it.

24th.—S. S. "Waldensian," in N. 48° 55', W. 44° 09', passed a small iceberg; in N. 48° 48' to 44° 33' passed one large and several small bergs; in N. 47° 45', W. 46° 22', passed a medium-sized berg; s. s. "Jane Breydel," in N. 42° 55', W. 49° 50', at 6 p. m., passed an iceberg, also passed another at 10 p. m., in N. 42° 53', W. 50° 51'; s. s. "State of Georgia," in N. 48° 21', W. 49° 33', sighted an iceberg about fifteen miles north of ship's position; s. s. "Rugia," in N. 43° 15', W. 53° 15', at 5 a. m., passed an iceberg from two to three hundred feet high.

25th.—Bark "Abel," in N. 43° 30', W. 48° 54', passed several icebergs, one about three hundred feet high; s. s. "Iowa,"

in N. 42° 55', W. 50° 2', at 8.30 p. m., passed a medium-sized iceberg; s. s. "Canada," (Fr.) in N. 43° 17', W. 51° 6', passed a large iceberg about three hundred feet high and six hundred feet long.

26th.—S. S. "Iowa," in N. 42° 53', W. 51° 4', at 12.30 a. m., passed a large iceberg.

29th.—S. S. "Circassian," passed twelve icebergs from one hundred and forty miles east of, to, Belle Isle.

30th.—S. S. "Anchoria," in N. 49° 33', W. 44° 5', at 11 a. m., passed two small icebergs; s. s. "Siberian," in N. 53° 9', W. 49° 22', passed an iceberg.

31st.—S. S. "Siberian," in N. 52° 35', W. 52° 15', passed a large iceberg; s. s. "Rhaetia," in N. 42° 34', W. 46° 12', at 12.25 p. m., passed a small iceberg.

The following data are taken from the "Atlantic Ice Reports" of the INTERNATIONAL NAUTICAL MAGAZINE:

1st.—S. S. "Norseman," in N. 44° 29', W. 48° 22', passed some small pieces of ice.

2d.—Bark "Carl Haasted," in N. 43° 0', W. 51° 0', passed one small iceberg.

4th.—Bark "Hugo," in N. 43° 0', W. 52° 25', passed three small icebergs and some small pieces.

6th.—S. S. "Zaandam," in N. 43° 23', W. 49° 37', passed three small icebergs.

7th.—S. S. "Westphalia," in N. 42° 32', W. 50° 53', at 11 a. m., passed a large iceberg about one hundred and fifty feet high; at 1 p. m., in N. 42° 28', W. 51° 33', passed a berg about two hundred feet high.

8th.—Bark "Drowning Louise," in N. 43° 0', W. 49° 30', passed three large icebergs.

9th.—Bark "Drowning Louise," in N. 42° 48', W. 50° 50', sighted two large icebergs.

13th.—S. S. "Tower Hill," in N. 45° 18', W. 48° 52', at 4 p. m., passed an iceberg.

15th.—S. S. "Fitzroy," in N. 43° 27', W. 49° 57', passed two medium-sized icebergs.

17th.—S. S. "Llandaff City," in N. 45° 14', W. 49° 21', at 10 a. m., passed a medium-sized iceberg.

18th.—S. S. "St. Simon," in N. 43° 0', W. 52° 0', at 5.20 a. m., passed an iceberg about one hundred and twenty feet high and half a mile long.

19th.—S. S. "Katie," in N. 43° 13', W. 51° 10', at 1.15 p. m., passed an iceberg about one hundred and eighty feet high and two hundred and fifty feet long; temperature of air, 58°; water, 58°. The s. s. "Edam," in N. 48° 28', W. 46° 0', passed an iceberg about two hundred feet high and four hundred feet long.

23d.—Bark "Annie J. Marshall," in N. 48° 47', W. 45° 30', passed five icebergs.

24th.—S. S. "Critic" sighted two small pieces of ice about five miles from Cape Race.

25th.—Ship "Mary Fraser," in N. 42° 36', W. 50° 0', passed two large icebergs.

29th.—Ship "Austria," in N. 43° 10', W. 52° 0', at 2 a. m., passed a large iceberg.

SIGNAL SERVICE AGENCIES.

Signal Service agencies have been established in the Maritime Exchange buildings at New York and Philadelphia, and in the Custom-House, Boston, where the necessary blanks and other information will be furnished to ship-masters.

In pursuance of the arrangements made with the Meteorological Office of London, England, there were cabled to that office from New York during July, 1885, thirteen reports concerning storms and icebergs encountered by vessels in the Atlantic west of the forty-fifth meridian; seven messages were sent from Boston.

TEMPERATURE OF THE AIR.

[Expressed in degrees, Fahrenheit.]

The distribution of mean temperature over the United States and Canada is exhibited on chart ii. by the dotted isothermal lines; and in the table of miscellaneous meteorological data.

logical data are given the means for the various stations of the Signal Service.

In the following table are given the mean temperatures for the several geographical districts with the normals and departures, as deduced from the Signal Service observations :

Average temperatures for July, 1885.

Districts.	Average for July. Signal-Service ob- servations.		Comparison of July, 1885, with the average for several years.
	For sev- eral years.	For 1885.	
New England.....	69.4	69.7	+ 0.3
Middle Atlantic states.....	75.4	76.1	+ 0.7
South Atlantic states.....	80.5	80.3	- 0.2
Florida peninsula.....	83.0	82.2	- 0.8
Eastern Gulf states.....	81.0	80.2	- 0.8
Western Gulf states.....	82.5	82.1	- 0.4
Rio Grande valley.....	85.0	84.0	- 1.0
Tennessee.....	79.2	78.4	- 0.8
Ohio valley.....	77.1	77.7	+ 0.6
Lower lake region.....	71.5	71.6	+ 0.1
Upper lake region.....	67.1	67.2	+ 0.1
Extreme northwest.....	66.4	66.7	+ 0.3
Upper Mississippi valley.....	75.5	76.5	+ 1.0
Missouri valley.....	73.3	74.7	+ 1.4
Northern slope.....	68.3	68.3	0.0
Middle slope.....	74.8	74.0	- 0.8
Southern slope.....	80.1	79.0	- 1.1
Southern plateau.....	79.4	79.8	+ 0.4
Middle plateau.....	73.0	73.3	+ 0.3
Northern plateau.....	70.9	72.8	+ 1.9
North Pacific coast region.....	64.4	66.7	+ 2.3
Middle Pacific coast region.....	66.8	67.2	+ 0.4
South Pacific coast region.....	75.9	77.0	+ 1.1

The mean temperature for July, 1885, throughout the country has differed very slightly from the normal. In but six of the twenty-three districts in the above table have the average departures exceeded 1°, viz., north Pacific coast region, +2°.3; northern plateau, +1°.9; Missouri valley, +1°.4; south Pacific coast region, +1°.1; Rio Grande valley, -1°.6; southern slope, -1°.1.

In the table of miscellaneous meteorological data are given the means and departures for the several stations, and on chart iv. the departures are exhibited by lines connecting stations of equal departure. The greatest departures are reported from the following Signal Service stations: Olympia, Washington Territory, +3°.5; Mackinaw City, Michigan, +3°.4; Huron, Dakota, +3°.3; Port Huron, Michigan, +3°.2; Cape Mendocino, California, and Fort Bennett, Dakota, +2°.9; Pittsburg, Pennsylvania, +2°.6; Des Moines, Iowa, +2°.4; Dayton, Washington Territory, +2°.3; San Francisco, California, and Little Rock, Arkansas, +2°.2; San Antonio, Texas, -4°.1; Oswego, New York, -3°.3; Sanford, Florida, -2°.9; Fort Davis, Texas, -2°.5; Fort Benton, Montana, and Mobile, Alabama, -2°.4; Montgomery, Alabama, -2°.2.

HIGH TEMPERATURES.

New York City: numerous cases of sunstroke occurred on the 8th, 9th, and from the 16th to 22d; the maximum temperature for the month, 95°.9, occurred on the 21st.

Albany, New York: on the 17th the temperature rose to 96°.6, which is the highest recorded since establishment of this station.

West Las Animas, Colorado: the highest temperature (105°) recorded since the establishment of this station in 1881, occurred on the 15th.

Block Island, Rhode Island: the maximum temperature, on the 18th, 87° 8, is the highest on the records of this station.

New London, Connecticut: on the 18th the temperature rose to 92° 4, which is the highest recorded at this station since July 19, 1878.

Baltimore, Maryland: the highest temperatures of the month, 98° 3 and 98° 7, occurred on the 20th and 21st, respectively; during the week ending with the 25th, eighteen fatal cases of sunstroke occurred.

Dubuque, Iowa: on the 20th out-door work was suspended on account of the intense heat. On the 30th the temperature rose to 97° 1, which is the highest recorded since 1874; the intense heat caused an almost total suspension of out-door work.

Dayton, Washington Territory: the 28th was the warmest day of which there is record at this station; the temperature rose to 102° 6.

Milwaukee, Wisconsin: the highest temperature, 92° 8, that has occurred since August, 1881, was recorded on the 28th.

Fort Sully, Dakota: on the 29th the temperature rose to 104° 5.

Des Moines, Iowa: intensely hot weather prevailed on the 30th. The temperature rose to 100° 1, which is the highest ever recorded here in July. Several cases of sunstroke occurred.

Yankton, Dakota: the 30th was the hottest day of the season, to date; maximum temperature, 100° 7.

Huron, Dakota: the 28th, 29th, and 30th are considered to have been the hottest days experienced in this region for many years.

Vevay, Switzerland county, Indiana: during the month the temperature reached 90°, or above, on seventeen days.

Manchester, Delaware county, Iowa: many persons were prostrated by the heat on the 30th.

RANGES OF TEMPERATURE.

The monthly, and the greatest and least daily ranges of temperature are given in the table of miscellaneous data. The monthly ranges were greatest in the upper Missouri valley and Rocky mountain districts, the maximum range, 67° 2, occurring at Phoenix, Arizona; they were least at stations on the Gulf coast, the minimum, 18° 0, occurring at New Orleans, Louisiana.

The following table shows the mean temperature for July, 1885, with the normals and departures, as reported by voluntary observers. It is desirable that all voluntary observers, whose observations cover a series of years, should deduce from their records temperature and precipitation normals for the purpose of comparison, as in the table below:

Stations.	County.	Normal tem- perature for July.	Number of years.	Mean temper- ature for July, 1885.	Departure.
<i>Arkansas.</i>		0		0	0
Lead Hill.....	Boone.....	78.9	3	82.7	+3.8
<i>Dakota.</i>					
Webster.....	Day.....	75.4	3	74.8	-0.6
<i>Georgia.</i>					
Milledgeville.....	Baldwin.....	80.6		80.6	0.0
<i>Illinois.</i>					
Anna.....	Union.....	78.8	10	79.0	+0.2
Biley.....	McHenry.....	70.5	24	71.8	+1.3
Collinsville.....	Madison.....	79.2		74.2	-5.0
Sycamore.....	DeKalb.....	70.3	4	71.6	+1.3
Sandwich.....	DeKalb.....	73.4	34	76.0	+2.6
Mattoon.....	Coles.....	77.7	5	79.2	+1.5
<i>Indiana.</i>					
Logansport.....	Cass.....	77.6	26	77.6	0.0
Vevay.....	Switzerland.....	78.4	21	78.4	0.0
Switzerland.....	Henry.....	74.4	31	76.1	+1.7
Mauzy.....	Rush.....	72.1	5	73.4	+1.3
<i>Kansas.</i>					
Wellington.....	Sumner.....	77.2	7	76.6	-0.6
Lawrence.....	Douglas.....	78.2		77.1	-1.1
Independence.....	Montgomery.....	78.4	14	78.2	-0.2
Yates Centre.....	Woodson.....	77.1	5	78.2	+1.1
Manhattan.....	Riley.....	78.7	25	77.5	-1.2
<i>Maine.</i>					
Gardiner.....	Kennebec.....	68.7	49	67.2	-1.4
<i>Maryland.</i>					
Fallston.....	Harford.....	75.0	11	74.6	-0.4
<i>Massachusetts.</i>					
Somerset.....	Bristol.....	74.6		75.6	+1.0
Worcester.....	Worcester.....	71.1	45	68.9	-2.2
<i>Missouri.</i>					
Saint Louis.....	Saint Louis.....	79.1	48	80.9	+1.8
<i>Nevada.</i>					
Carson City.....	Ormsby.....	71.6		72.3	+0.7
<i>New Jersey.</i>					
South Orange.....	Essex.....	73.5	15	73.4	-0.1
<i>New York.</i>					
North Volney.....	Oswego.....	69.6	18	69.7	+0.1
Palermo.....	Oswego.....	69.3	32	67.5	-1.8
<i>Ohio.</i>					
Wauseon.....	Fulton.....	72.4	15	74.4	+2.0
<i>Pennsylvania.</i>					
Dyberry.....	Wayne.....	68.2	18	69.2	+1.0
Wellborough.....	Tioga.....	71.2	4	71.5	+0.3
<i>Texas.</i>					
New Ulm.....	Austin.....	82.6	14	81.5	-1.1
<i>Vermont.</i>					
Woodstock.....	Windsor.....	68.0	18	68.7	+0.7
<i>Virginia.</i>					
Dale Enterprise.....	Rockingham.....	75.6	5	79.9	+4.3
Bird's Nest.....	Northampton.....	79.2	16	83.0	+3.8
<i>West Virginia.</i>					
Helvetia.....	Randolph.....	70.1	9	69.5	-0.6
<i>Wisconsin.</i>					
Beloit.....	Rock.....	72.9	36	73.3	+0.4

Table of comparative maximum and minimum temperatures for the month of July.

State or Territory.	Station.	For 1885.		Since establishment of station.			
		Max.	Min.	Max.	Year.	Min.	Year.
Alabama	Montgomery	98.0	63.1	106.9	1881	60.8	1882
Do	Mobile	94.0	66.0	101.0	1883	63.8	1882
Arizona	Prescott	98.5	47.6	103.0	1878	42.0	1879
Do	Yuma			118.0	1878	61.0	1879
Arkansas	Little Rock	100.0	64.6	101.3	1884	61.0	1882
Do	Fort Smith	98.6	63.8	104.5	1884	61.0	1882
California	San Francisco	78.0	51.0	83.0	1881, 1884	49.0	1874, 1881
Do	San Diego	81.8	57.6	86.0	1877	53.7	1884
Colorado	Denver	97.3	50.3	102.3	1874	42.0	1873
Do	Pike's Peak	57.0	24.2	64.0	1879	18.0	1876
Connecticut	New Haven	93.5	50.3	95.0	1876	51.0	1873
Do	New London	92.4	53.0	93.0	1876, 1876	51.0	1876
Dakota	Fort Buford	96.0	45.7	104.0	1881	37.5	1884
Do	Yankton	100.7	47.8	103.0	1883	44.0	1877
Delaware	Cape Henlopen	98.0	54.5				
Do	Del. Breakwater			91.0	1880	59.0	1882
Dist. of Columbia	Washington City	99.1	54.1	102.0	1879	56.1	1884
Florida	Jacksonville	94.8	70.6	104.0	1879	68.0	1877, 1879
Do	Key West	93.5	73.3	97.0	1880	72.7	1883
Georgia	Atlanta	91.2	59.0	99.0	1880	53.0	1880
Do	Savannah	95.2	65.4	105.0	1879	66.0	1876
Idaho	Boise City	98.5	50.6	106.0	1877	41.0	1880
Do	Lewiston	99.3	53.1	104.8	1882	48.0	'80, '81, '82
Illinois	Chicago	93.9	52.6	99.0	1874	50.0	1873
Do	Cairo	95.8	62.1	99.0	1874, 1881	60.0	1883
Indiana	Indianapolis	94.5	47.5	101.0	1881	53.0	1882
Do	Greencastle	92.4	53.4				
Indian Territory	Fort Supply	96.0	60.0				
Do	Fort Sill	100.0	62.5	106.0	1881	56.0	1880
Iowa	Dubuque	97.1	51.5	101.0	1874	50.4	1882
Do	Keokuk	99.0	58.0	100.0	1871	56.0	'73, '80, '83
Kansas	Leavenworth	98.0	50.0	104.0	1874	53.5	1882
Do	Dodge City	97.3	56.6	108.0	1876	50.0	1877
Kentucky	Louisville	97.2	54.0	102.0	1874	57.0	1882
Louisiana	New Orleans	92.5	74.5	96.0	1877	69.8	1882
Do	Shreveport	99.7	69.2	107.0	1875	64.0	'77, '80, '82
Maine	Eastport	77.0	49.0	86.0	1873, 1880	45.0	1882, 1884
Do	Portland	86.8	53.7	97.0	1876	51.0	1876, 1882
Maryland	Baltimore	98.7	56.0	99.0	'76, '79, '80	59.0	1876, 1882
Massachusetts	Boston	92.8	51.4	101.0	1880	46.0	1874
Do	Springfield			94.5	1876	49.0	1876
Michigan	Marquette	88.8	46.4	100.0	1878	40.3	1883
Do	Detroit	89.5	54.4	100.0	1878	50.0	1872, 1883
Minnesota	Saint Vincent	91.1	39.2	92.5	1881	40.0	1881, 1883
Do	Saint Paul	94.7	35.0	100.0	1883	45.0	1873
Mississippi	Vicksburg	98.7	64.4	100.0	1878, 1881	62.0	1881
Missouri	Saint Louis	96.6	60.0	104.0	1881	57.0	1876
Montana	Fort Assinaboine	96.0	41.3	95.0	1882	35.0	1881
Do	Fort Custer	100.0	44.2	103.0	1881	42.0	1882
Nebraska	North Platte	97.6	48.0	107.0	1877	45.0	1877, 1882
Do	Omaha	97.8	55.2	105.0	1874	51.0	1873
Nevada	Winnemucca	92.4	42.0	104.0	1877	45.0	1877, 1878
Do	Pioche			98.0	1878	47.0	1880
New Hampshire	Mount Washington	69.4	35.5	72.0	1881	27.0	1883
New Jersey	Sandy Hook	92.7	58.4	100.0	1876	59.0	1880
Do	Cape May	88.5	61.0	91.0*	1874	56.0	1880
New Mexico	Santa Fe	88.5	53.0	95.5	1878	46.0	1872, 1880
New York	Buffalo	87.4	48.3	90.0	1878	47.5	1876
Do	New York City	95.9	46.2	99.0	1876	40.0	1873, 1882
North Carolina	Charlotte	95.0	56.1	101.0	1879	61.0	1881
Do	Smithville	89.9	60.2	100.0	1879	61.0	1882
Ohio	Cincinnati	96.6	53.0	103.5	1881	58.2	1883
Do	Cleveland	90.1	53.0	96.0	1878	49.6	1879
Oregon	Roseburg	100.8	40.3	97.0	1880	40.0	1875, 1880
Do	Portland	99.0	49.1	95.5	1875	46.0	1883
Pennsylvania	Erie	89.8	53.0	94.0	1878	52.0	1883
Do	Philadelphia	97.0	59.9	100.0	1876	56.0	1883
Rhode Island	Block Island	87.8	55.3	86.0	1881, 1882	55.0	1879
Do	Newport			92.0	1878	53.5	'76, '81, '82
South Carolina	Charleston	94.5	66.0	104.0	1879	67.0	1882
Tennessee	Nashville	96.1	57.8	101.2	1881	59.3	1882
Do	Knoxville	94.0	52.2	100.0	1879	53.0	1881
Texas	Fort Davis	96.7	58.4	110.0	1881	53.0	1880
Do	Galveston	91.5	75.0	97.0	1875	59.0	1880
Utah	Salt Lake City	99.7	53.8	98.0	1877	45.0	1880
Vermont	Burlington			96.0	1878	47.0	1875, 1876
Virginia	Lynchburg	97.0	54.4	101.8	1881	55.0	1876, 1882
Do	Norfolk	98.8	59.4	102.5	1876	60.0	1882
Washington Ter.	Olympia	97.0	43.5	93.5	1880	40.0	1882
Do	Dayton	102.6	40.6	102.0	1880	37.4	1881
West Virginia	Morgantown			97.0	1874	52.0	1873
Wisconsin	Milwaukee	92.8	51.7	95.0	'71, '74, '78	50.0	1875, 1876, 1880, 1883
Do	La Crosse	92.0	55.7	101.0	1874	52.0	1880, 1883
Wyoming	Cheyenne	88.2	48.5	100.5	1881	37.6	1882

FROSTS.

Frosts are reported to have occurred during July as follows:
 On the summit of Pike's Peak, Colorado, on the 25th and 28th.
 Braddock, Summit county, Colorado, from 1st to 9th, 11th, 12th, 14th, 15th, 17th, 18th, 20th, 22d, 23d, 25th.
 Boyne, Charlevoix county, Michigan, 10th.
 Dale Enterprise, Rockingham county, Virginia: light frosts were reported in the lowlands on the 1st and 2d.
 Fort Bridger, Wyoming: light frost occurred on the 15th; heavy frost on the 26th.

The La Crosse (Wisconsin) "Daily Republican," of July 3d, contained the following:

RICHMOND, VIRGINIA, July 3.—A dispatch from Wytheville, Virginia, states that heavy frosts prevailed in that section Tuesday night (June 30th-July 1st), and ice formed at Crockett's Depot, in Wythe county, yesterday morning. It is the first time in the recollection of anyone here that ice has been known to form in this state in the month of July.

PALMYRA, WISCONSIN, July 3.—A heavy white frost fell in this section on Tuesday night (June 30th-July 1st). It is feared the vineyards have suffered therefrom.

PRECIPITATION.

[Expressed in inches and hundredths.]

The distribution of rainfall over the United States and Canada for July, 1885, as determined from reports from more than eight hundred stations, is exhibited on chart iii.

In the following table are shown, for each of the geographical districts, the normal July precipitation for a series of years, the average for July, 1885, and the excess or deficiency as compared with the normal:

Average rainfall for July, 1885.

Districts.	Average for July. Signal-Service observations.		Comparison of July, 1885, with the average for several years.
	For several years.	For 1885.	
	Inches.	Inches.	Inches.
New England	4.42	2.21	-2.21
Middle Atlantic states	4.24	2.93	-1.31
South Atlantic states	5.72	4.63	-1.09
Florida peninsula	5.56	6.25	+0.69
Eastern Gulf states	4.88	5.06	+0.18
Western Gulf states	3.96	4.01	+0.05
Rio Grande valley	1.97	0.75	-1.22
Tennessee	4.02	4.73	+0.71
Ohio valley	4.51	1.90	-2.61
Lower lake region	3.60	3.27	-0.33
Upper lake region	3.50	2.92	-0.58
Extreme north west	3.22	3.21	-0.01
Upper Mississippi valley	4.14	4.05	-0.09
Missouri valley	4.10	4.09	-0.01
Northern slope	1.86	1.94	+0.08
Middle slope	3.40	3.25	-0.15
Southern slope	3.18	1.71	-1.47
Southern plateau	2.24	1.30	-0.94
Middle plateau	0.30	0.29	-0.01
Northern plateau	0.58	0.19	-0.39
North Pacific coast region	0.70	0.47	-0.23
Middle Pacific coast region	0.06	0.11	+0.05
South Pacific coast region	0.07	0.17	+0.10

The rainfall for the month has been decidedly below the average in the southern slope, Rio Grande and Ohio valleys, and on the Atlantic coast from South Carolina northward, the departures being most marked in the Ohio valley and New England. While the average for several districts, viz., the Gulf states, middle slope, and the upper Mississippi and Missouri valleys, nearly corresponds with the respective normals, the precipitation has been of very uneven distribution, there being marked departures, both above and below the average, in the same districts. At Montgomery, Alabama, the monthly precipitation, 7.54, exceeded the July average for the last twelve years by 3.89, while the records at Mobile, Alabama, and Pensacola, Florida, show deficiencies of 2.67 and 4.01 as compared with the normals for fourteen and five years, respectively. In the Missouri valley a deficiency of 2.17 occurs at Yankton, Dakota, and an excess of 3.29 at Leavenworth, Kansas, the records at these stations covering periods of twelve and fourteen years, respectively. In the upper Mississippi valley deficiencies of 2.27, 2.38 and 3.45 occur at Davenport and Keokuk, Iowa, and Cairo, Illinois, while at La Crosse, Wisconsin, Saint Paul, Minnesota, and Des Moines, Iowa, the monthly precipitation exceeded the average by 3.49, 2.66 and 2.55, respectively.

In the table of miscellaneous meteorological data are given the monthly precipitation, with the departures from the average, at the various Signal Service stations.

The following table shows the average July precipitation,